

Figure 1 - Construction of Typical Existing Hydromount (Prior Art)

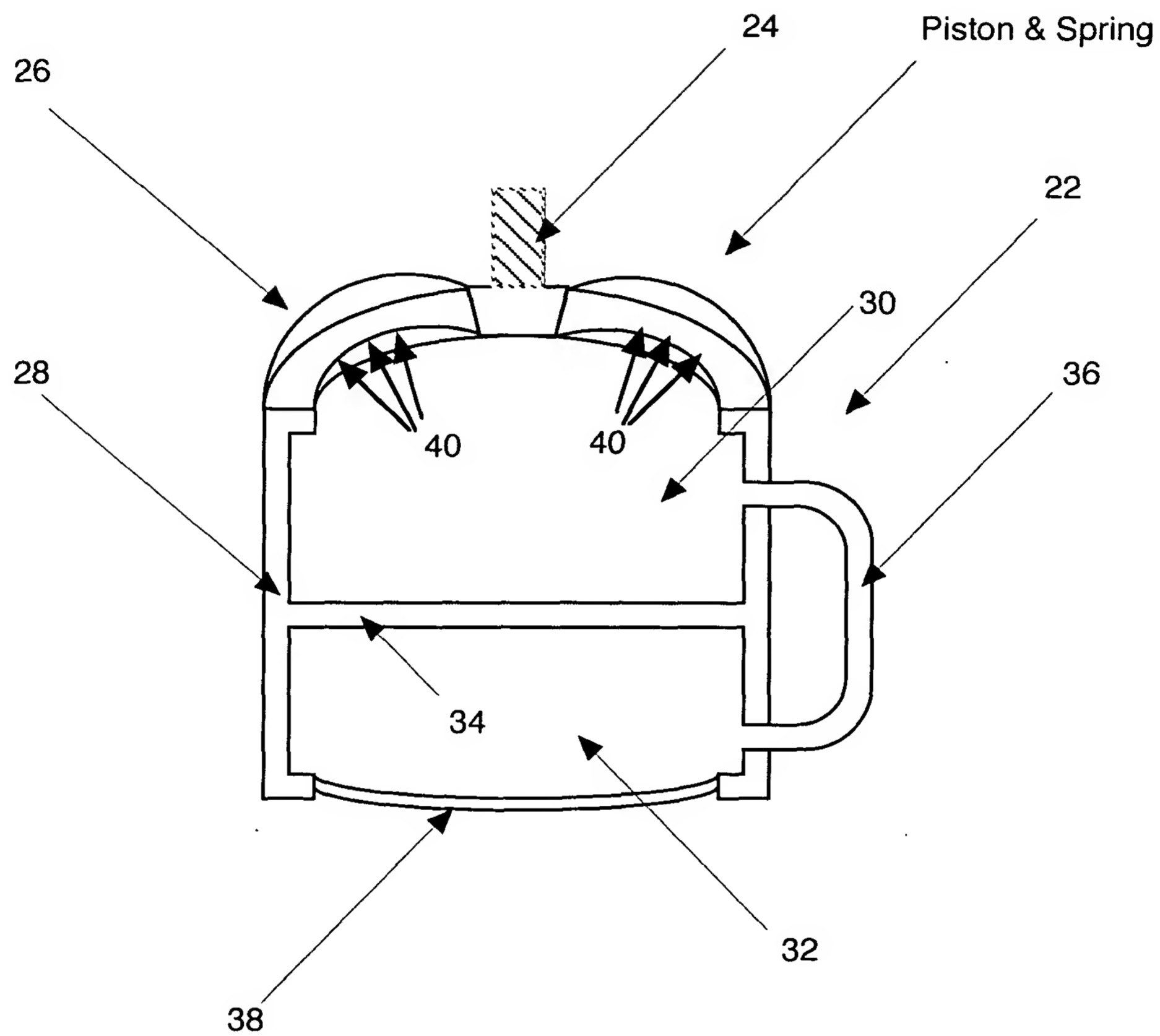


Figure 2 - Construction of Typical Existing Hydromount w/ Alternate Construction (Prior Art)

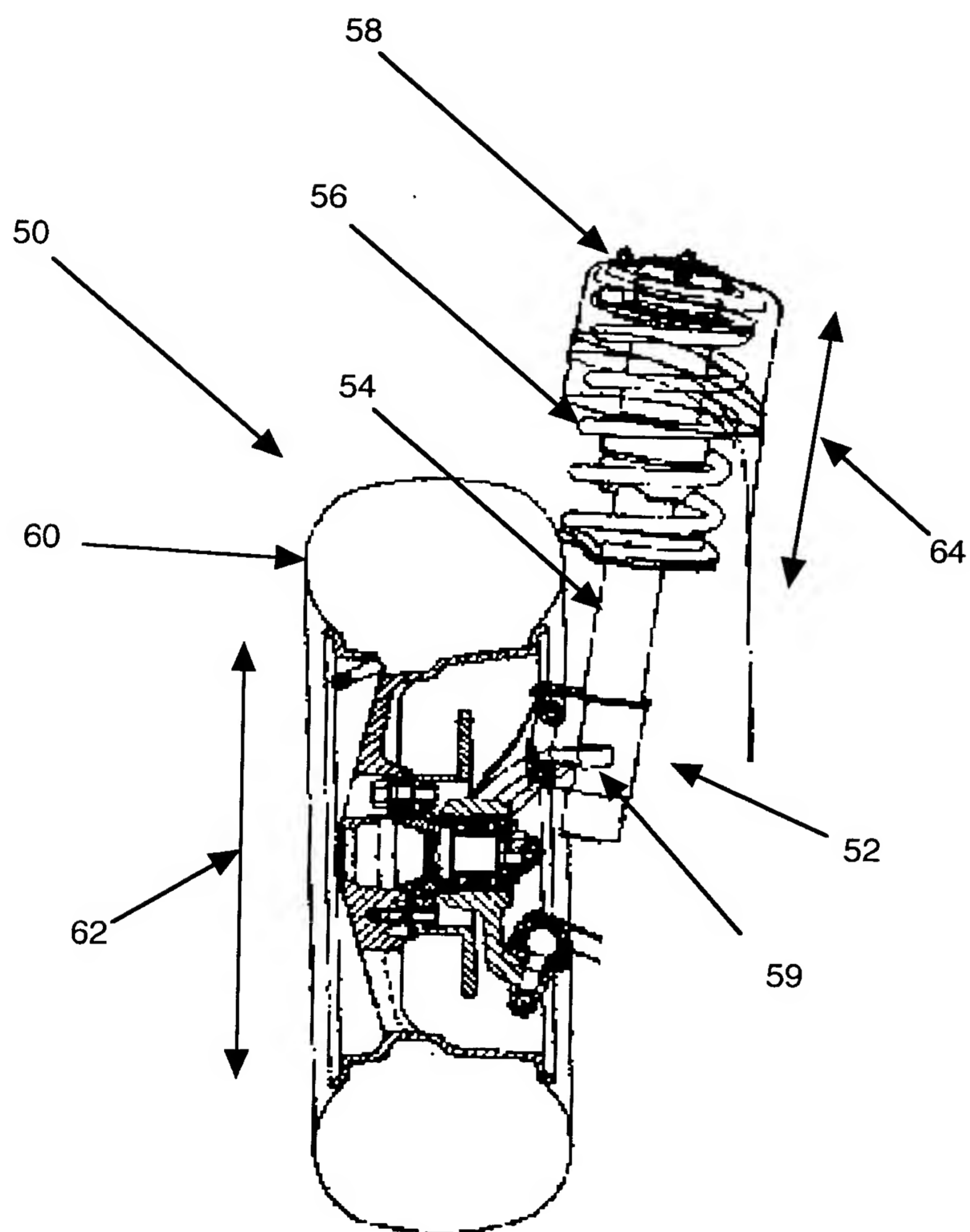


Figure 3 - Diagram of a Typical Shock Absorber in a Vehicle (Prior Art)

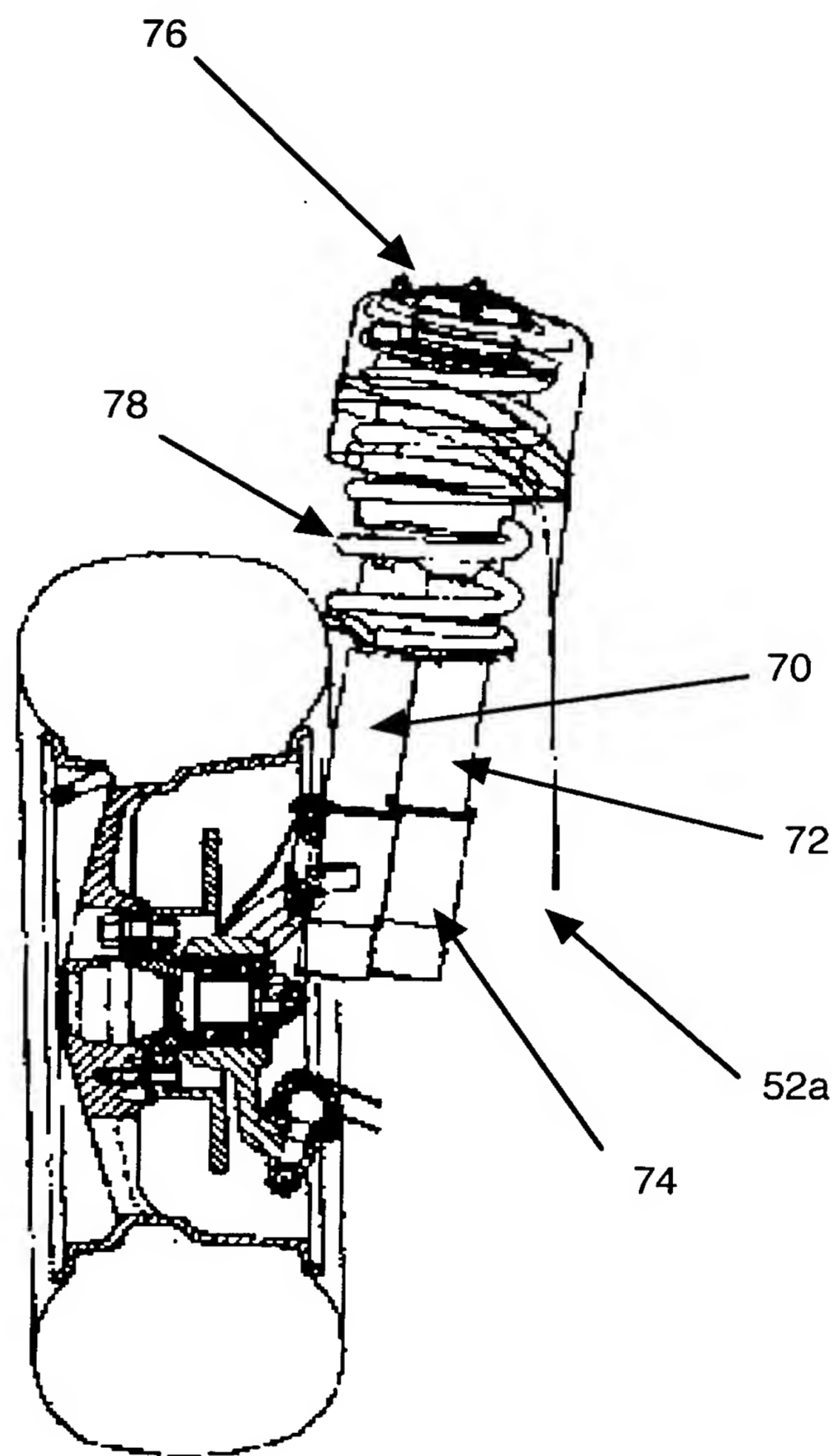


Figure 4 - Diagram of a Parallel Placement of a Shock Absorber and a Long Stroke Hydraulic Tuned Damper in a Vehicle

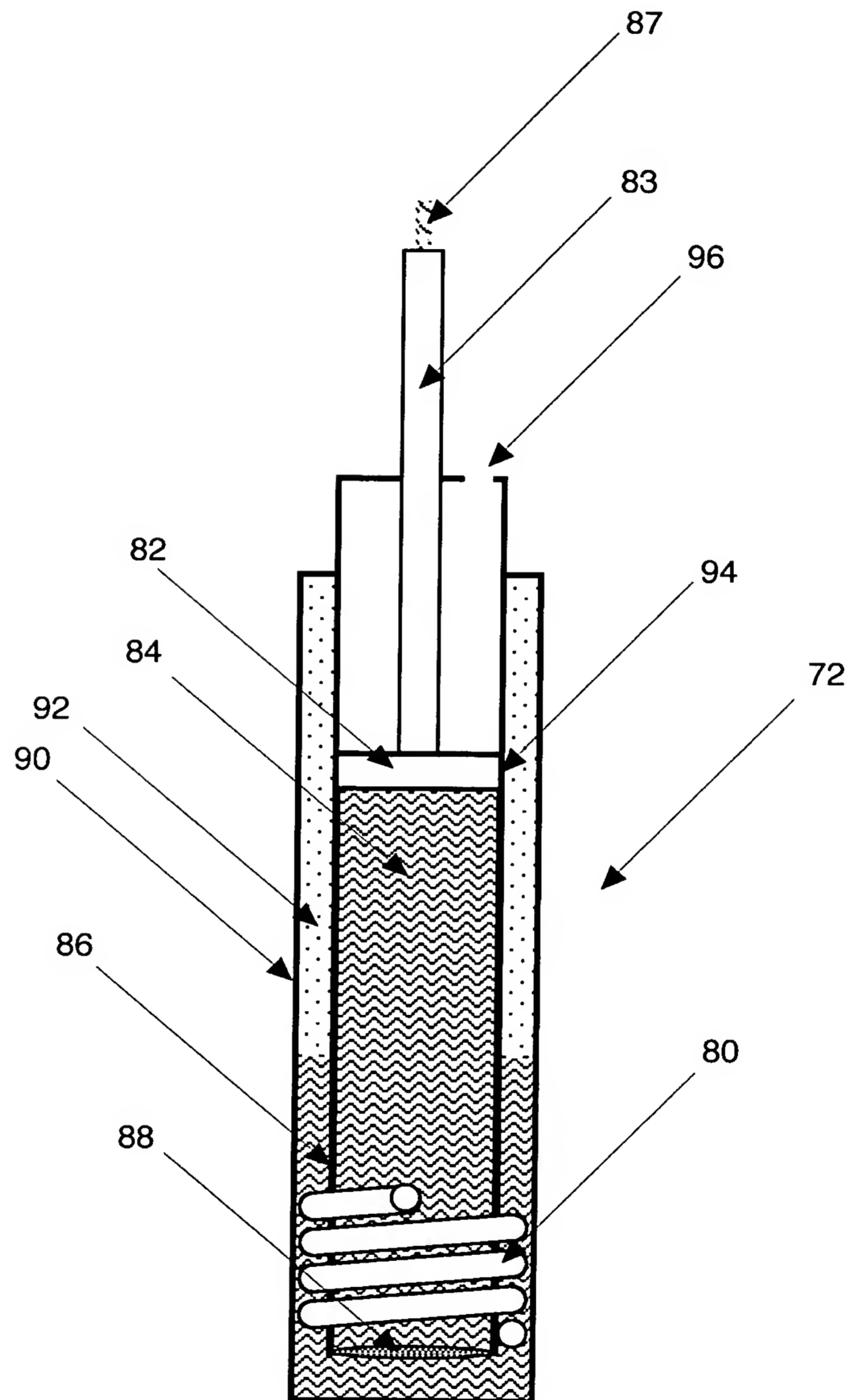


Figure 5 - Construction of LSHTD

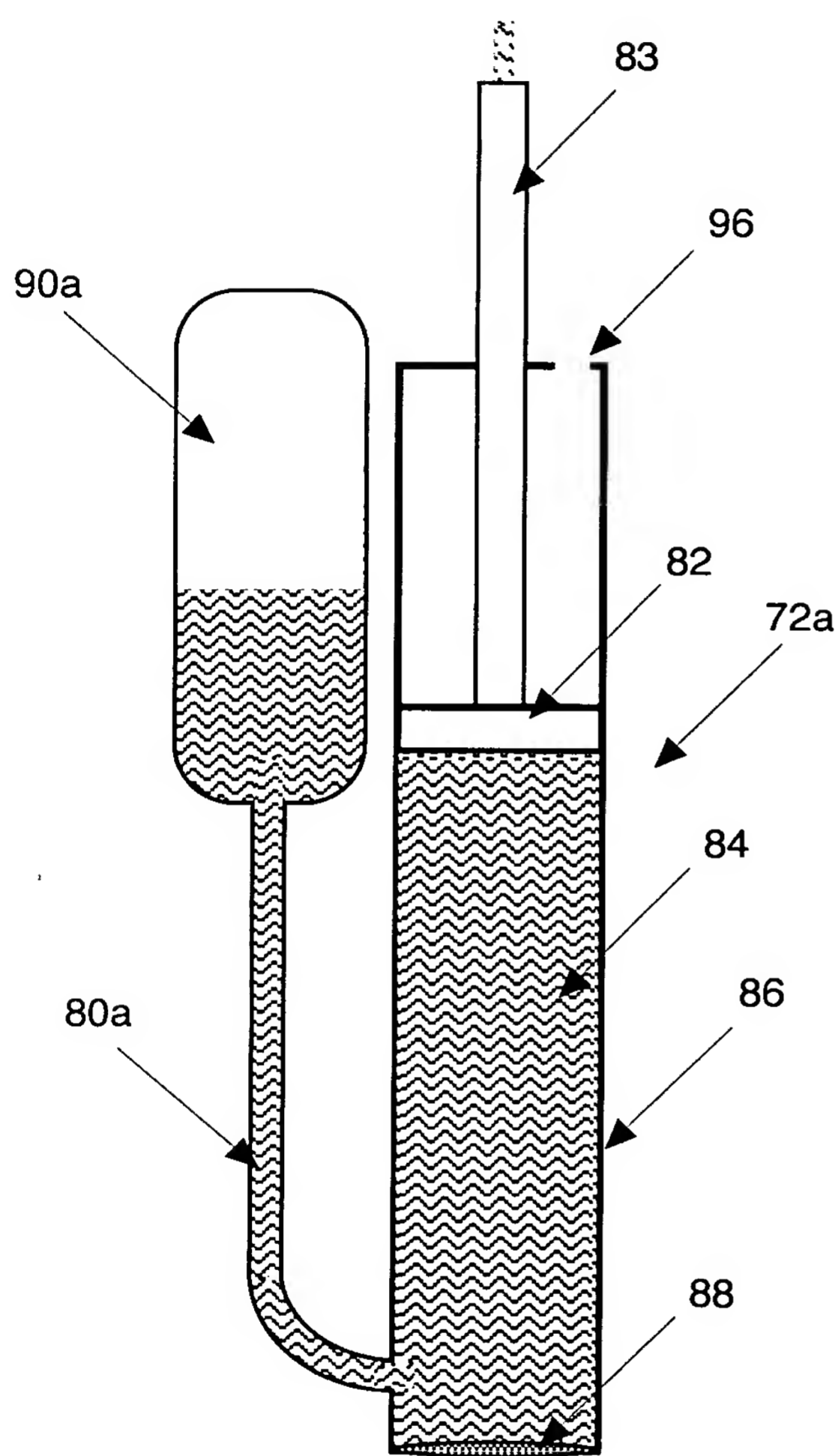


Figure 6a - LSHTD with External Collection Chamber

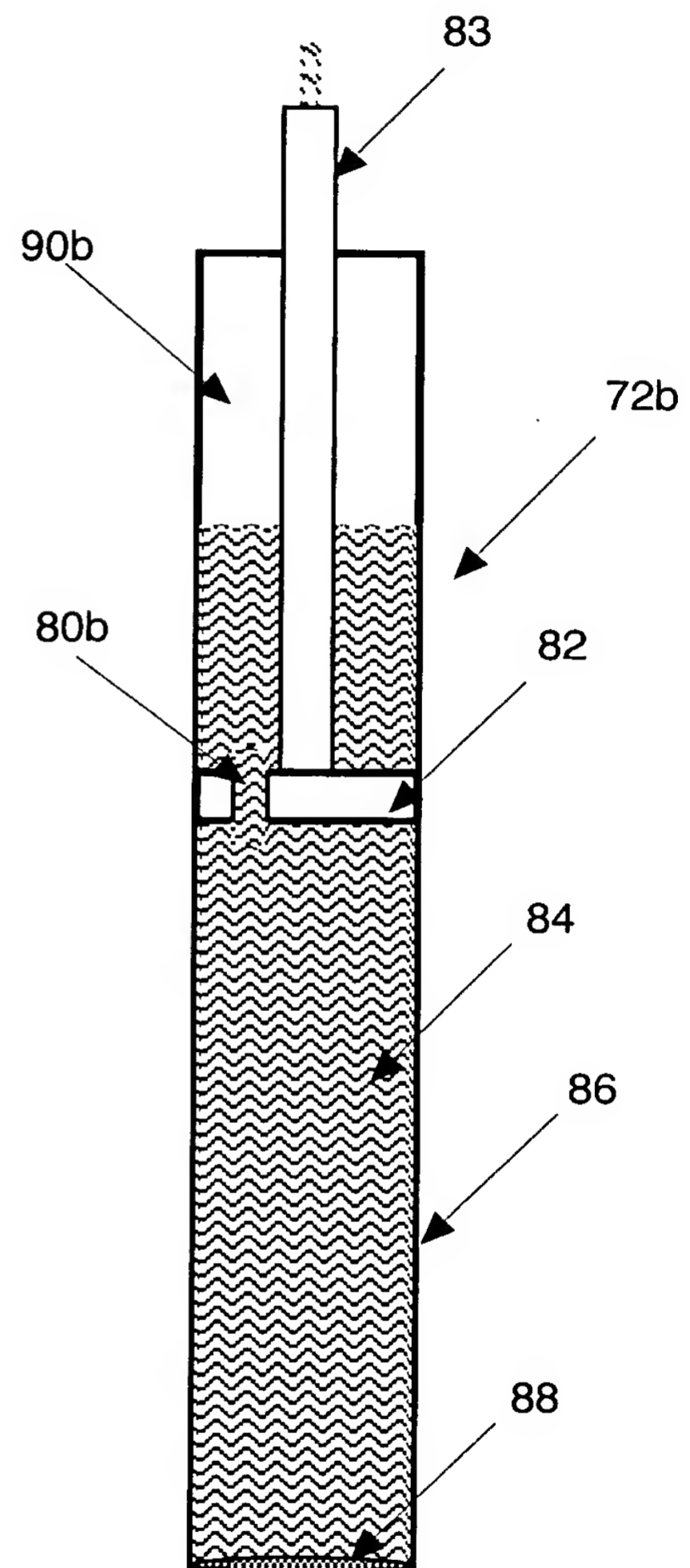


Figure 6b - LSHTD with Internal Collection Chamber and Inertia Track Integrated into Piston

Figure 6 - Alternate LSHTD Constructions

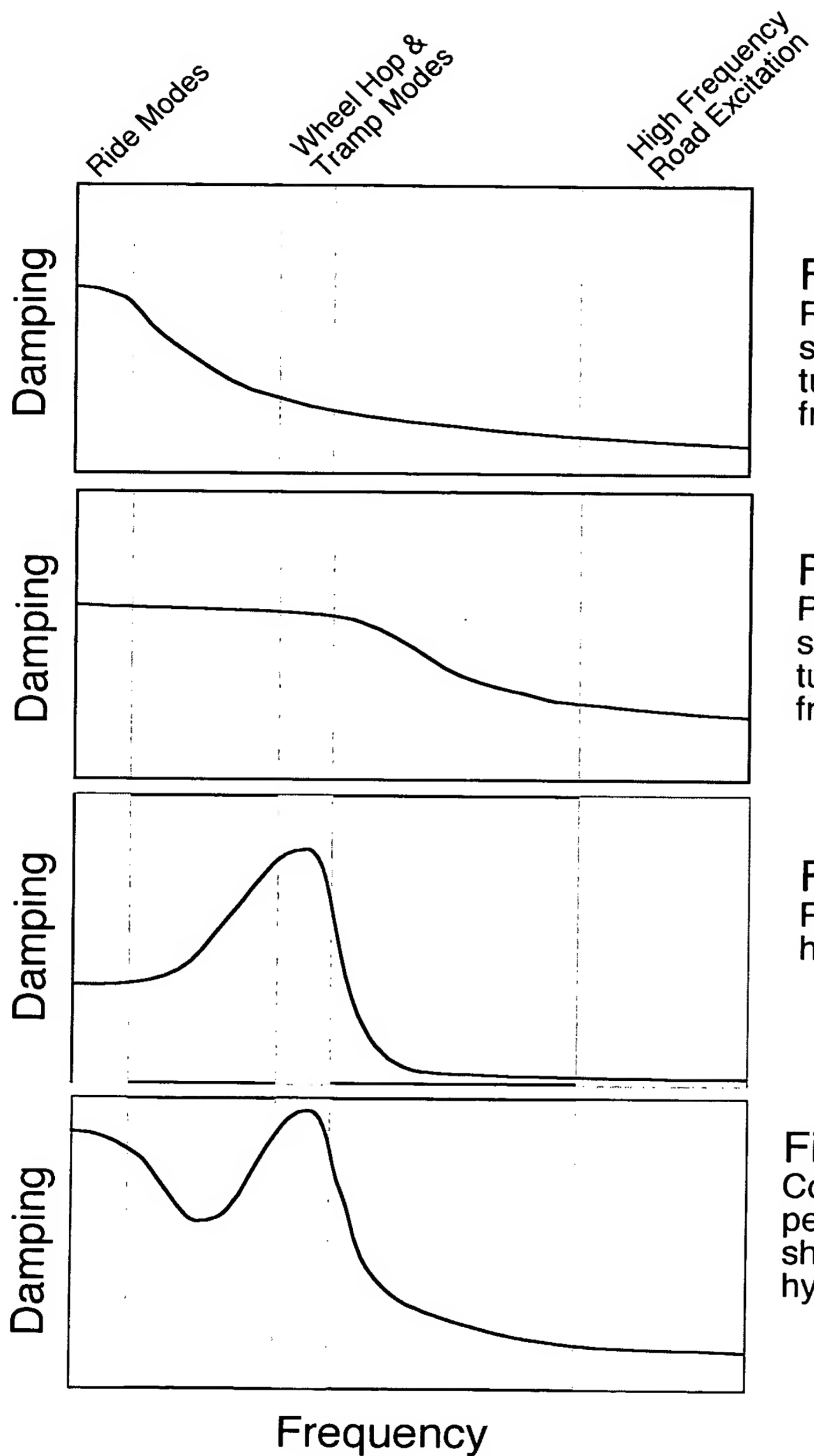


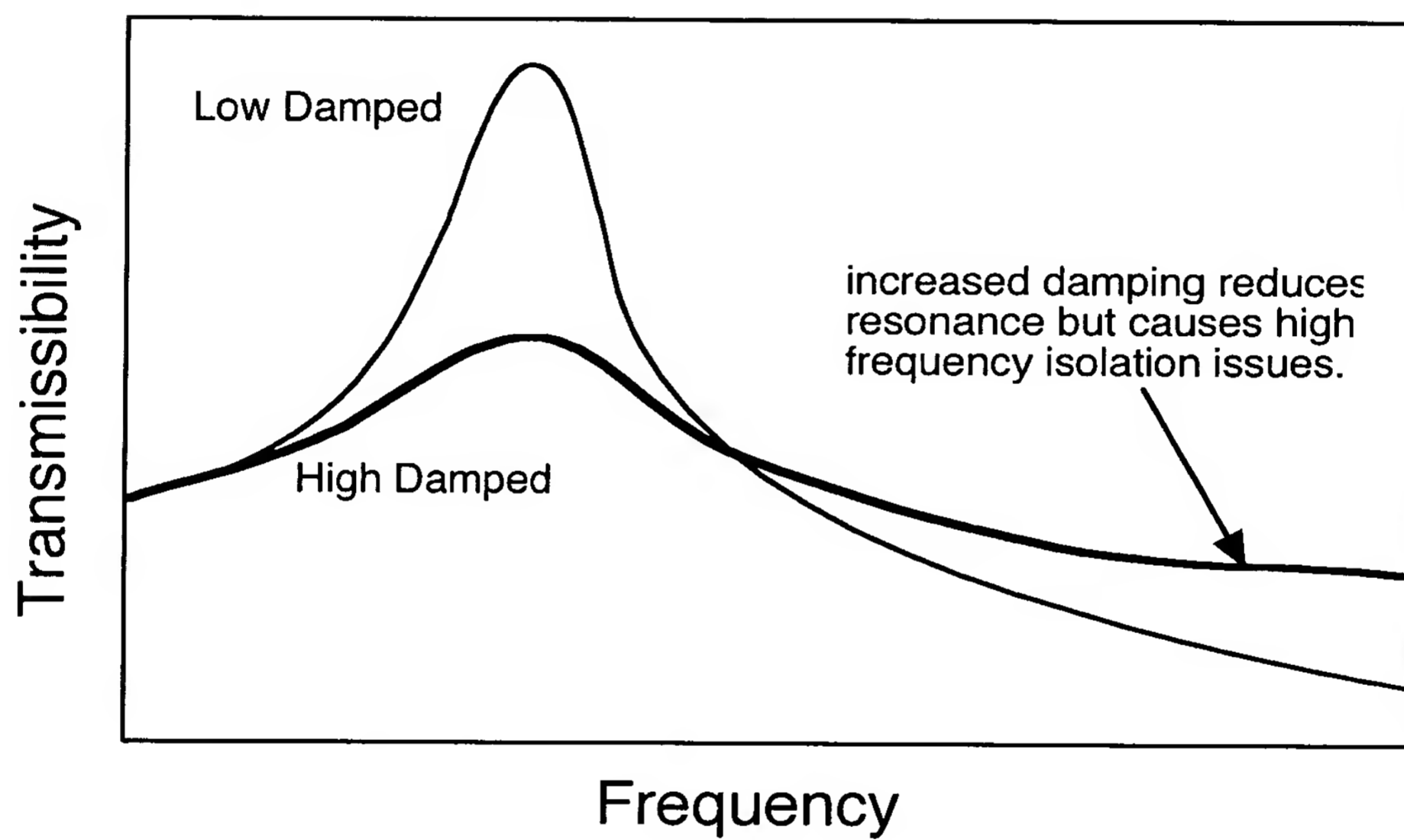
Fig 7a -
Performance of
shock absorber
tuned for low
frequency blow-off.

Fig 7b -
Performance of
shock absorber
tuned for high
frequency blow-off.

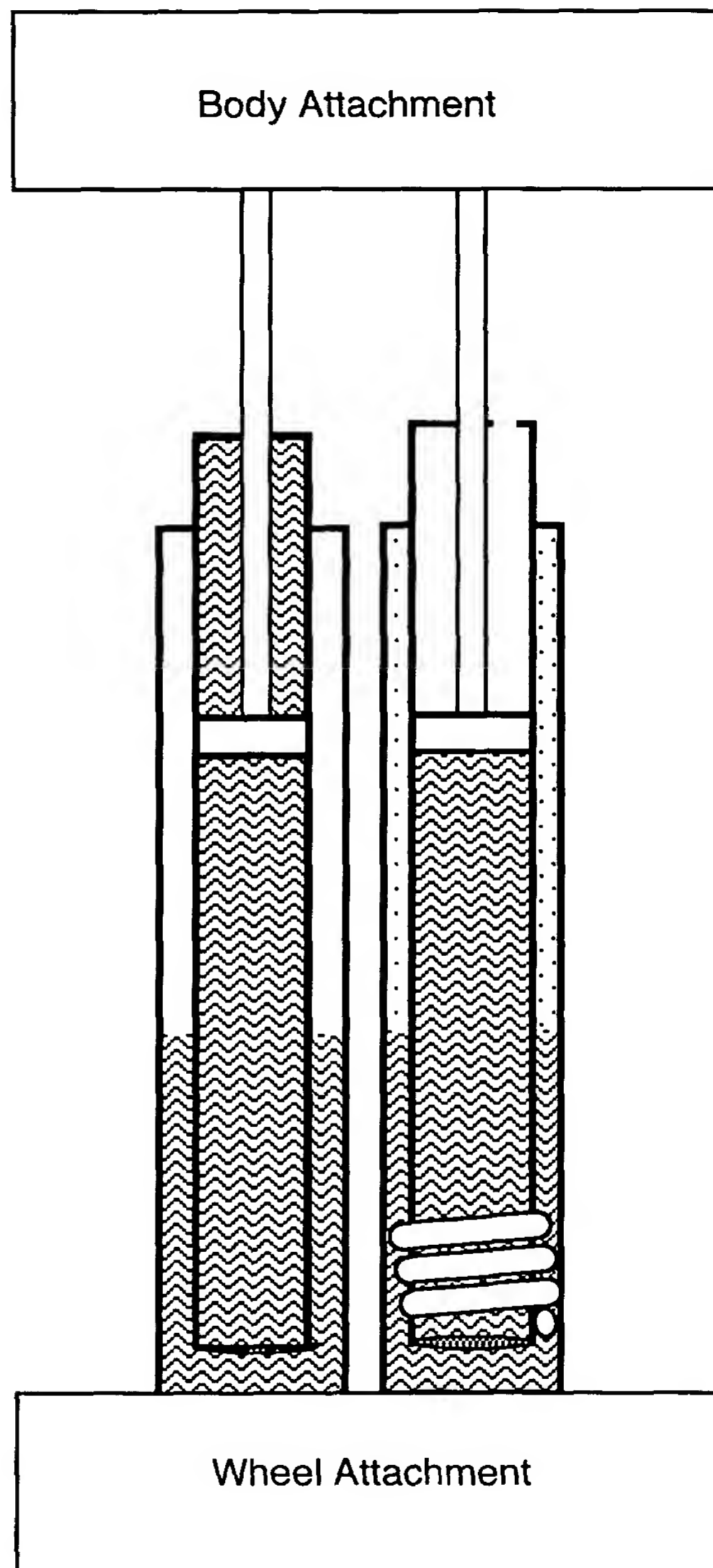
Fig 7c -
Performance of
hydro-shock.

Fig 7d -
Combined
performance of
shock absorber &
hydro-shock.

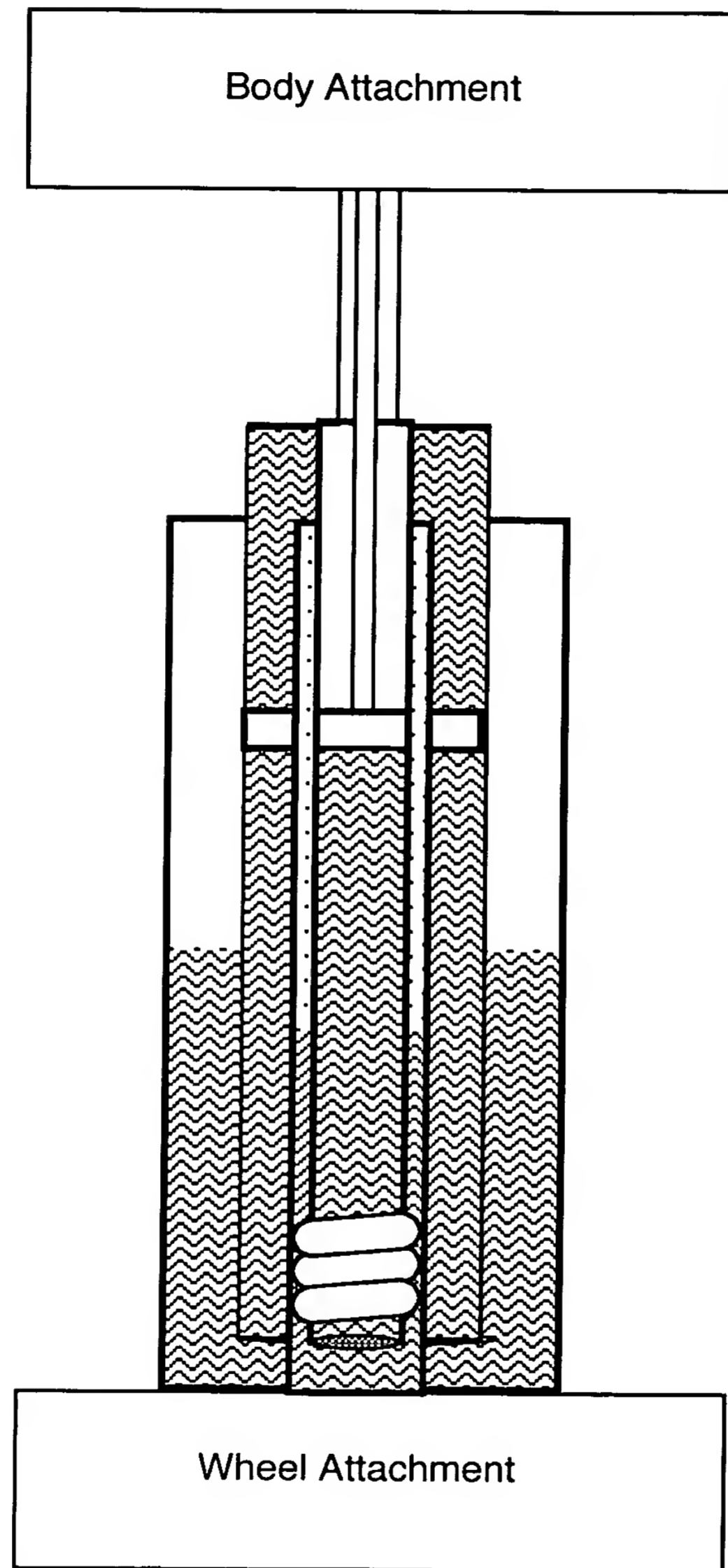
Figures 7 - Shows that the Hydro-Shock/Shock Absorber combination is effective at damping both ride and wheel hop frequencies without compromising high frequency isolation



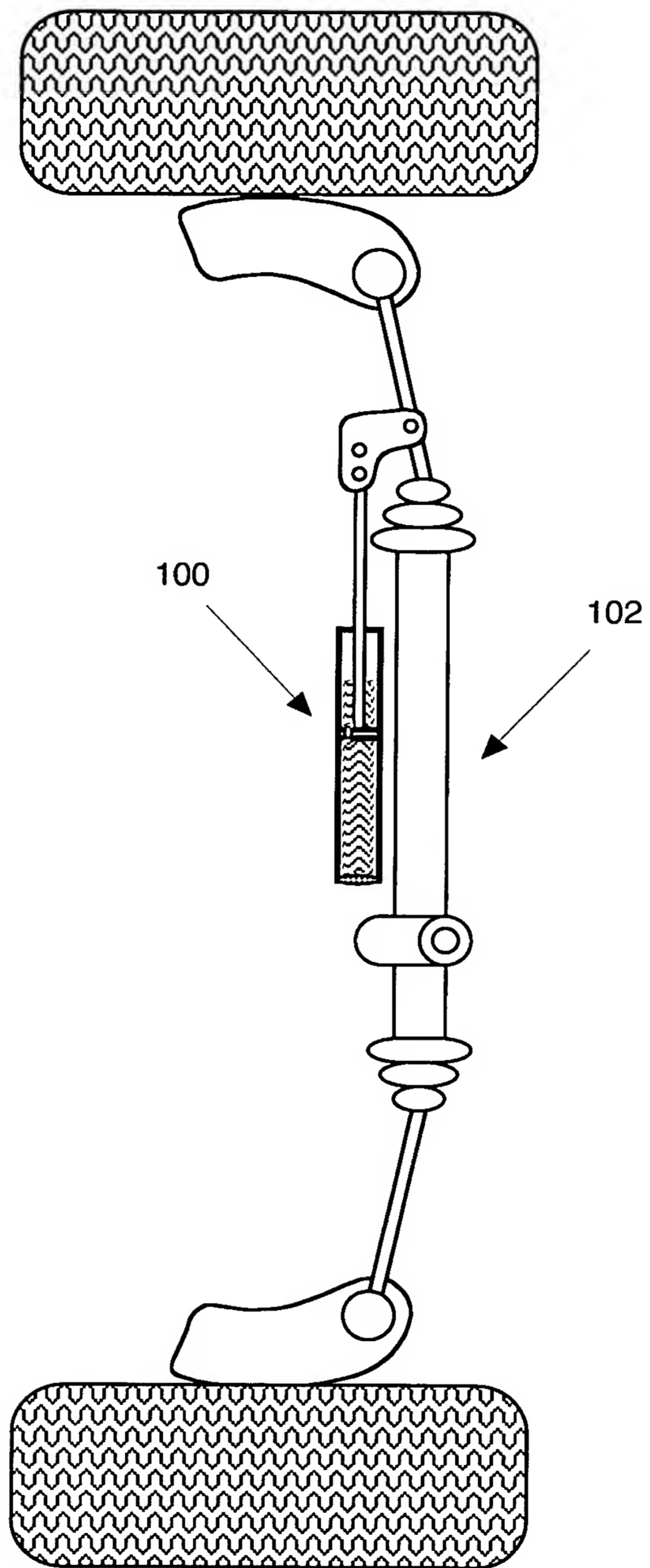
Figures 8 - Single Degree of Freedom example demonstrating the effects of damping on resonance and high frequency isolation



Figures 9 - Adjacent construction of Hydro-Shock and shock absorber



Figures 10 - Concentric construction of Hydro-Shock and shock absorber integrated into one assembly



Figures 11 - Long Stroke Hydraulic Tuned Damper in Parallel with Vehicle Steering System